DOCUMENT RESUME

ED 282 120 CG 019 884

AUTHOR Burgio, Maria R.
TITLE The Role of Social Cognition in Support Friendships for the Aging.
PUB DATE Jun 87
NOTE 24p.; Paper presented at the Iowa Conference on Personal Relationships (Iowa City, IA, June, 1987). Document contains small print.
PUB TYPE Reports - Research/Technical (143) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Cognitive Processes; *Friendship; Interpersonal Relationship; *Life Satisfaction; *Older Adults; *Social Cognition; Social Networks; *Social Support Groups; *Well Being

ABSTRACT

The presence of support friends is related to general well being in successful aging. Some social gerontological research concludes that the positive effects of interacting with support friends can be attributed to the quality of these relationships; however, there is a gap in our understanding regarding the mechanism which accounts for this effect. This study, part of a larger study of older adults' close relationships, attempted to show that social cognitive processes play an important role in the support-well being relationship. Older adults (N=142) living in New York City participated in the two-session study. In Phase I, subjects completed a questionnaire which included demographic and health questions, the Life Satisfaction Index-A, the Interpersonal Experience Questionnaire, and the Friendship Expectancies Inventory. In Phase II of the study, subjects were orally administered the Network Analysis Profile which measures both quantitative and qualitative aspects of the social network. The results indicated that the number of support friends was related to interpersonal affect, but not to life satisfaction. The significant results of the multiple regression analyses lend support to the view that assessments of others' behaviors affect interaction outcomes, supporting the early works of both Kelley (1955) and Asch (1946). Four tables and a five-page list of references are included. (Author/NB)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED282120

THE ROLE OF SOCIAL COGNITION IN SUPPORT FRIENDSHIPS FOR THE AGING

Maria R. Burgio, Ph.D.
Assistant Professor of Psychology
Utica College of Syracuse University

CG019884

Paper presented at the Iowa Conference on Personal Relationships
University of Iowa, Iowa City, Iowa, June, 1987.

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
☑ This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
Maria R. Burgio
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

BEST COPY AVAILABLE

Abstract: The Role of Social Cognition in Support Friendships for the Aging.

The presence of support friends is related to general wellbeing in successful aging. Some social gerontological research concludes that the positive effects of interacting with support friends can be attributed to the quality of these relationships; however, there is a gap in our understanding regarding the mechanism which accounts for this effect. The present paper argues that social cognitive processes may influence positive interaction among support friendships for the aging. The sample was comprised of 142 older adults living in New York City. The significant results of the multiple regression analyses lend support to this view that assessments of others' behaviors affect interaction outcomes, supporting the early works of both Kelley (1955) and Asch (1946).

The Role of Social Cognition in the Support Friendships of the Aging

Social psychologists have long held that cognitive assessment of others mediate interaction outcomes (Asch, 1946; Kelley, 1955; 1970). Asch's Attribution Theory (1946) states that people use inferences about others to account for others behaviors. Kelley's Personal Construct Theory states that perceptions of someone's action or an individual's values, opinions, etc. act to order past experiences and make sense of current events. Both these theories have been supported by numerous studies in the context of social psychological explanations for impression formation, attribution of social cause, interaction in groups, and interpersonal attraction (Wrightsman & Deaux, 1981).

An independent line of research in the developmental field examines cognitive assessments in another context. The focus of this research is to determine the ways in which children develop values or expectations about peers (Bigelow, 1977) and to determine the ways in which expectations about friends' behaviors change both over time (preschool to college years) and for different intensities of friendships (LaGaipa, 1981). The general finding is that children assess friends' behaviors differently as they grow older, and that they have age-specific expectations about how close friends should behave.

Both lines of reasoning could be relevant to the social gerontological question concerning the role of support friends in the general wellbeing of the aging. Social support can

mobilize psychological resources, help deal with emotional problems, and provide the individual with practical help like money, advice, medical assistance and appropriate feedback (Cobb, 1976; Cohen & McKay, 1984; Antonucci & Depner, 1982). In addition, support friends have been shown to affect the wellbeing of older people (Haas-Hawkings, 1978; Heinemann, 1985). The widowed and the institutionalized elderly constitute just some of the individuals whose support needs are met by special friends through which they report achieving a sense of understanding and are shown to develop coping strategies (Cantor, 1980; Haas-Hawkings, 1978). Notwithstanding the pervasive effects of social support and the special role played by friends in the networks of the aging, research attempting to show the exact role of support friends in the general wellbeing of the aging have been fraught with numerous problems.

Social support systems, in the general population, and friend support systems of the aging are not well-understood and are difficult to define operationally and thus to measure. Broadly defined social support has been conceived as a subset of the social network which provides goods and services (Antonucci & Depner, 1982), and which functions to enhance the quality of life for any individual. More specific definitions of social support among the aging have not materialized, limited by the lack of qualitative information about social networks. In addition, numerous studies expound the usefulness of functional rather than structural methods in collecting data about social networks and

social support: however, both methods leave much to be desired since they usually measure the quantity of social interaction, without adequate identification of those friends who serve support functions, and without any information about how these friends are perceived. In general then, although the literature on the friend support systems of the successfully aging express concerns about these conceptual and methodological problems, the contribution of social cognitive processes to the positive effects experienced in support relationships has been, for the most part, overlooked.

Recent attempts to explain/define social support have indicated that social support may affect the individual at the behavioral, the emotional and the cognitive levels (Andrews & McKennell, 1980; Stock, Okun & Benin, 1986; Lawton, 1982; Cohen & McKay, 1984), indicating the inherent weakness in most studies on social support which do not consider cognitive processes. The individual interacting within his/her friend network may interact with different people of varying importance at different levels of intensity (Simons, 1984). It is reasonable to assume that relationships affect an individual at several levels simultaneously, affecting both the psychological/emotional experience as well as the cognitive experience of friends' behaviors. Thus, measuring wellbeing (the psychological/emotional outcome of interaction) without measuring cognitive assessments of others' behaviors may be inadequate to understand the impact of support friends. A social cognitive approach seems necessary in order to

properly address this complexity.

It is a well-documented fact that cognitive assessments of others affect the evaluation of others' behaviors (Kelley, 1970; Asch, 1946), and that these assessments mediate interaction outcomes (Beckman, 1981; Ward, Sherman & LaGory, 1984; Reis, 1984; Hokanson & Meyer, 1984; Knapp, Ellis & Williams, 1980). It has also been found that expectancies about close friends' behaviors differ significantly from expectancies about friendships of lesser intensities (LaGaipa, 1977). Therefore, it seems possible that positive expectations about support friendships in the networks of the successfully aging may have a direct bearing on the wellbeing reported by elderly who have support friends.

The present study, part of a larger study of older adults' close relationships, attempted to show that social cognitive processes play an important role in the the support-wellbeing relationship which is repeatedly confirmed in the social support literature for other populations (Cobb, 1976; Cohen & McKay, 1984; Holihan & Moos, 1981) and in the literature about the aging (Beekman, 1983; Cantor, 1980; Haas-Hawkings, 1978; Heinemann, 1985). The supposition was that those elderly who have positive cognitive assessments of close friends are more apt to report a higher sense of wellbeing; however, a functional analysis of the network was necessary in order to identify those individuals who are important to an older person's emotional support. Therefore, the present study attempted to first, identify those friends who serve support functions, utilizing the functional approach.

Secondly, the present study attempted to determine whether social cognitive assessments of friends giving support contribute in crucial ways to the support-wellbeing relationship. The contention would be to place, at least, some of the responsibility of effective interaction with friends squarely on the individual, rather than merely looking for either the availability of close friends, or amount of interaction.

METHOD

Sample.

Data was collected from a sample of 142 white, middle class elderly men and women aged 65 years and over, living in New York City. A short presentation was delivered at five senior centers in Brooklyn and Queens for interested members of the centers. Those individuals who expressed an interest in the project were asked to be research participants. All of the participants were active members of the senior centers.

The demographic information for the sample is reported in Table 1. The mean age of the sample was 72.1 years, with the eldest being 85 years old. Forty-five percent were "young-old" (65 - 79 years of age), 39% were 71- 74 years of age and 39% were 76-79 years of age. Only 6% of the sample comprised the above 80 group. Fifty-one percent of the respondents were female and 49% were male. Forty-four percent were married at the time of the interview and 30% were widowed. 25% of the sample were either divorced, separated or never married. Fifty-four percent of the sample reported that they were Catholic, 36% were Jewish and 8%

were Protestant. The remaining 2% claimed no religious affiliation.

Instruments and Procedure.

The testing took place in two sessions. During Phase I, potential participants were given a short, group presentation about the research project. If they expressed an interest in participating, they filled out a questionnaire which included: the demographic and health questions, the Life Satisfaction Index-A (LSIA), the Interpersonal Experience Questionnaire (IEQ), and the Friendship Expectancies Inventory (FEI). The data from the LSIA was skewed, the scores were converted to normalized standard scores using the stanine scale (See Table 2 for the means and standard deviations of the standardized LSIA, IEQ and FEI). The demographic and health form included information about age, marital status, occupation, religious affiliation, and selfassessed health status. Those individuals who rated their health as poor were excluded from the study, as good health has traditionally been one criteria of "successful aging".

Wellbeing was assessed both as an assessment of overall conditions of existence as derived from a comparison of one's aspirations to one's actual achievements, using the Life Satisfaction Index-A (Adams, 1969; Campbell et al., 1976; George, 1979) and as a measure of immediate positive or negative affective states, using the Interpersonal Experience Questionnaire (Lehmann, Shinn, Allen & Simko,1983). The findings of numerous studies indicate that wellbeing in the aging is multidimensional

and thus justify the use of two wellbeing measures (Lawton, Moss, Fulcomer & Kleban, 1982; Stock et al., 1986; Larson, Mannell & Zuzanek, 1986; Cutler, 1979; Andrews & Withey, 1976).

Friendship expectancies were defined as "the prescription of role expectancies which provide a basis for evaluation and interpretation of close friends behaviors" (LaGaipa, 1980), and were thought to be cognitive assessments of support friends which influence wellbeing.

Both the reliabilities and validities have been established for all the instruments used in the present study.

Phase II of the project entailed contacting those interested individuals who participated in Phase I in order to orally administer the Network Analysis Profile (NAP) which measured both quantative and qualitative aspects of the social network. The research participant was asked about the frequency and types of activities that characterized each friendship and then was asked to rate each friend on closeness of bond, intimacy and understanding. A friend was coded as a support friend if the participant reported receiving both a sense of intimacy and understanding from this friend, and if the friend was rated as a "best friend", regardless of type or frequency of activity (See Table 2 for mean and standard deviation of support friend). The inter-rater reliability of the NAP has been reported by Sokolovsky & Cohen (1981) as high with the range of $\underline{r}$= .83 - $\underline{r}$= .92 on various subsections of the profile. In the present study the inter-rater reliabilities were found to be similarly high. For $\underline{N}$= 10,

correlations ranged from r=.75 to r=.99 with significance levels ranging from .01 to .0001.

Correlational analyses of the data were performed in order to ascertain any significant trends between the numbers of support relationships and wellbeing. Hierarchical regression analyses were used to determine the contribution made by friendship expectancies to the support friend- life satisfaction and the support friend - interpersonal affect relationships. The demographic variables, namely, age, sex, marital status and religious background, coded as dichotomous variables, were entered first, in order to control for any variance contributed by them, followed by expectancies and close support friends.

RESULTS

As indicated on Tables 3 and 4, the correlations between close support friendships and life satisfaction and interpersonal affect are r= ,07, n.s. and r=.20, p<.02, respectively.

Hierarchical regression analyses of the relation of friendship expectancies and support friends to life satisfaction and interpersonal affect are given in Table 3 and Table 4, respectively. As can be seen from Table 3, the R^2 for life satisfaction from demographics alone is .0631 ($F(4,137)$= 2.307, p<.06). The R^2 for life satisfaction from friendship expectancies is .0811 ($F(5,136)$=2.40, p<.05). The R^2 for life satisfaction from number of support friends is .0822 and the increment due to support friends is .0011. Thus support friends did not contribute to life satisfaction over and above the variability contributed by

demographics and expectancies ($F(1,135)=.1495$, n.s.). The data indicated that the increment due to support friends is so obviously near zero that expectations account for most of the effect, thereby supporting the view that friendship expectancies influence the life satisfaction of elderly persons who have support friends.

In Table 4 the increment in R^2 for demographic variables and friendship expectancies was compared to the increment in R^2 for demographic variables, support friends and expectancies. As indicated, the R^2 for interpersonal affect from demographic measures alone is .0287 ($F(4,137)=1.01$, n.s.). The R^2 for interpersonal affect from friendship expectancies is .1805 ($F(5,136)=5.99$, $p<.01$). The R^2 for interpersonal affect from number of support friends is .1955 and the increment due to support friends is .0150 ($F(1,135)= 2.106$, n.s.). Thus, support friends did not contribute to interpersonal affect over and above the variability contributed by demographic variables and by expectancies, indicating that friendship expectancies account for most of the effect.

In summary, the results of the study indicated that the number of support friends (1) were related to interpersonal affect but not to life satisfaction, and (2) did not contribute a significant proportion of the variability in life satisfaction and interpersonal affect over and above the variability contributed by demographic background and expectancies. The latter finding indicated that friendship expectancies influence

the wellbeing experienced by the aging who have support friends. It also indicated that friendship expectancies are a better predictor of life satisfaction and interpersonal affect than the number of support friends within an elderly person s network. Therefore, this would mean that older person s life satisfaction is based more on their internal processes than on their realistic contacts.

DISCUSSION

The correlational data indicated that number of support friends is related to interpersonal affect, but is not related to life satisfaction. Sheer size of network may not affect the life satisfaction of the elderly. Although it would seem that more support friends would imply more available support in one s network, the data indicated that "more" did not necessarily mean "better". The insignificant finding is consistent with the studies that find size of the network or level of activity to be unrelated to life satisfaction in the aging (Conner, Powers & Bultena, 1979; Filsinger & Sauer, 1978). These studies used both support and non-support people to measure size of network and thus, it originally seemed reasonable to assume that numbers of support friends would be more important than were number of total acquaintances, neighbors and other friends. However, this distinction was not borne out by the data. Alternately, well-being in the aging may be multidimensional and thus differentially affected by interaction with support friends. Other studies have found friends to affect the affective component of wellbeing

without affecting the global overall sense of life satisfaction (Larson, Mannell & Zuzanek, 1986; Heinemann, 1985).

The results of the regression analyses support the view that positive cognitive assessments of support friends affect the support friend-wellbeing relationship. These results demonstrate that although support friendships are important to the wellbeing of the elderly, expectancies about close friendships are the most significant influences on the states of wellbeing in the aged. Antonucci & Depner (1982) suggest that the positive impact of social supports can be explained by the fact that they are based on norms and expectations and that the individual develops a secure sense of the content and meaning of future interactions.

The results of the present study also support the early works of Kelley (1955, 1970) and Asch (1946) on the importance of the attritional process to affecting interaction outcomes. Kelley's Personal Construct Theory predicts that values and opinions of other people affect how behaviors of other people are interpreted. The implication of this is that these interpretations of others' behaviors ultimately affect interaction outcomes. In addition, some research has confirmed the importance of attribution of close friends' behaviors, finding that attribution of others' ability to provide rewards varied with a sense of wellbeing (LaGaipa, 1977).

The data lends support to the few existing studies which find that positive interaction outcomes are related to the

cognitive assessment of others' ability to provide the older individual with support (Baldassare, Rosenfield & Rook, 1984; Roberto & Scott, 1986; Hokanson & Meyer, 1984; Knapp, Ellis & Williams, 1980; McCormick, 1983), as well as lending support to research which finds that the cognitive assessment of one s own ability to provide friendship rewards affects wellbeing in the aging (Mancini, Quinn, Gavigan & Franklin, 1980).

In addition, the data suggest a tentative explanation for the inconsistent findings in social gerontological studies which measure wellbeing as an outcome of having close or intimate friendship, or as an outcome of amount of support. It is possible, for example, that the studies which find that friendship is unrelated to wellbeing (Mancini et al., 1980; Toseland & Rasch, 1979) produce insignificant results because friendships that serve support functions have not been properly identified or because they overlook information about friendship expectancies as they relate to wellbeing.

In conclusion, the present study indicates that the positive effects of social support need to be explored in view of the social cognitive processes which may mediate social interaction. The implication is that positive assessments of support friends can influence positive interaction with them. Further research is needed which will focus on social cognitive processes and thus expand our knowledge about social interaction and wellbeing among the aged (Mancini et al, 1980; Antonucci & Depner, 1982; Hays, 1984; Cohen & Rajkowski, 1982).

Table 1

Means and Standard Deviations of the Main Variables (N= 142)

Variable	Range	Mean	SD
Support Friends	0- 4	.4	.7
Friendship Expectancies	43-175	103.14	25.49
Interpersonal Affect	28-140	83.73	9.79
St. Life Satisfaction	1- 9	5.15	2.05

Table 2

Demographic Information about the Sample (N = 142)

Marital Status	N	Religious Affiliation	N
30% Widowed	44	8% Protestant	11
11% Divorced	15	54% Catholic	77
14% Never Married	20	36% Jewish	51
44% Married	63	2% Other	3

Age*		N	Sex	N
45%	65-70	53	49% Male	68
33%	71-74	39	51% Female	74
16%	76-79	39		
6%	80-85	11		

*Note: Mean age = 72.1, SD= 5.1

Table 3

Summary of hierarchical regression analysis of the relation of friendship expectancies and support friends to life satisfaction (N=142)

Variable	r	R^2	F^1	df	R^2 change	F^2	df
Demographics		.0631	2.30	4,137			
Expectancies	.12	.0811	2.40*	5,136	.0180		
Support Friends	.08	.0822	2.02	6,135	.0011	.15	1,135

* $p<.05$

1 Tests of significance for R-squared

2 Tests of significance for R-squared change

Table 4

Summary of hierarchical regression analysis of the relation of friendship expectancies and support friends to interpersonal affect (N=142)

Variable	r	R^2	F^1	df	R^2change	F^2	df
Demographics		.0287	1.01	4,137			
Expectancies	.38**	.1805	5.99**	5.136	.1518		
Support Friends	.20*	.1955	5.47**	6.135	.0150	2.106	1,135

* $p<.02$

**$p<.01$

1 Test of Significance for R-squared

2 Test of Significance for R-squared change

References

Asch, S.E. (1946). Forming impressions of personality. Journal of Abnormal Soc. Psychol., 41, 258-290.

Adams, D.L. (1969). Analysis of a life satisfaction index. Journal of Gerontology, 24, 470-474.

Andrews, F.M. & McKennell, A.C. (1980). Measures of self-reported wellbeing: Their affective, cognitive and other components. Social Indicators, 4, 127-155.

Andrews, F.M. & Withey, S.B. (1976). Social indicators of wellbeing: Americans perceptions of life quality. New York: Plenum Press.

Antonucci, T. & Depner, C.E. (1982). Social support and informal helping relationships. In T. Ashby Wills (Ed.), Basic Processes in Helping Relationships, N.Y.:Academic Press.

Baldassare, M., Rosenfield, S. & Cook, K. (1984). The types of social relations predicting elderly wellbeing. Research of Aging, 6(4), 549-559.

Beckman, L.J. (1981). Effects of social interaction and children's relative inputs on older women's psychological well-being. Journal of Personality and Social Psychology, 4(16), 1075-1086.

Beekman, L. (1983). The assessment of social networks and social support in the elderly. Journal of the American Geriatrics Society, 31(12), 743-749.

Bigelow, B.J. (1977). Children's friendship expectations: A cognitive-developmental study. Child Development, 48(1),

246-253.

Campbell, A., Converse, P.E. & Rodger, W.L. (1976). The Quality of American Life: Perceptions, Evaluations, and Satisfaction. New York:Russell Sage.

Cantor, M.H. (1980). The informal support system: its relevance in the lives of the elderly. In E. Borgotta & N. McClusky, (Eds.), Aging and Society: Current Research. California: Sage Publications, 131-144.

Cobb, S. (1976). Social support as moderator of life stress. Psychosomatic Medicine, 38, 300-314.

Cohen, C.I. & Rajkowski, H. (1982). What s in a friend? Substantive and theoretical issues. Gerontologist, 22(3), 261-266.

Cohen, S. & McKay, G. (1984). Social support, stress and the buffering hypothesis: A theoretical analysis. In A. Baum, J.E. Sinser & S.E. Taylor (Eds.), Handbook of Psychology and Health:Vol 4(pp. 253-267), Hillsdale, N.J.:Erlbaum.

Conner, K.A., Powers, E.A. & Bultena, G.L. (1979). Social interaction and life satisfaction: An empirical assessment of late life persons. Journal of Gerontology, 34(1), 116-121.

Cutler, N.E. (1979). Age variations in the dimensionality of life satisfaction. Journal of Gerontology, 34, 573-578.

Filsinger, E. & Sauer, W.J. (1978). An empirical typology of adjustment to aging. Journal of Gerontology, 33(3), 437-445.

George, L.K. (1979). The happiness syndrome: Methodological and

substantive issues in the study of social-psychological wellbeing in adulthood. Gerontologist, 19(2), 210-216.

Haas-Hawkings, G. (1978). Intimacy as a moderating influence on the streets of loneliness in widowhood. Essence, 2(4), 249-258.

Hays, J.A. (1984). Aging and family resources: Availability and proximity of kin. Gerontologist, 24(2), 149-153.

Heinemann, G. D. (1985). Interdependence in informal support systems: The case of elderly, urban widows. In W.A. Peterson & J. Quadagno (Eds.), Social Bonds in Later Life (pp 165-186), Beverly Hills, CA:Sage.

Hokanson, J.E. & Meyer, B.E. (1984). Interpersonal expectancies and the preferences for various types of social behaviors of depressed patients. Journal of Personal & Social Relation ships, 1(3), 279-292.

Holihan, C.L. & Moos, R.H. (1981). Social support and psychological distress: A longitudinal analysis. Journal of Abnormal Psychology, 90, 365-370.

Kelley, G.A. (1970). A brief introduction to personal construct theory. In D. Bannister (Ed.), Perspectives in Personal Construct Theory, New York: Academic Press.

Kelley, G.A. (1955). The Psychology of Personal Construct Theory. New York: Norton.

Knapp, M.L., Ellis, D.G. & Williams, B.A. (1980). Perceptions of communication behavior associated with relationship terms. Communication Monographs, 47(4), 262-278.

LaGaipa, J.J. (1981). Children s friendships. In S.W. Duck & R. Gilmour (Eds.), Personal Relationships 2: Developing Personal Relationships, London, Academic Press.

LaGaipa, J.J. (1980). Life stages and the termination of friendship. Paper presented at the meeting of the Southeastern Psychological Ass, Washington, D.C. March 29.

LaGaipa, J.J. (1977). Interpersonal attraction and social exchange. In S. W. Duck (Ed.), Theory and Practice in Interpersonal Attraction(pp 249-270), New York: Academic Press.

Larson, R., Mannell, R. & Zuzanek, J. (1986). Daily wellbeing of older adults with friends and family. Psychology and Aging, 1(2), 117-126.

Lawton, M.P. (1982). The wellbeing and mental health of the aged. In T. Field, A. Stein, H. Quay, L. Troll & G.E. Finley (Eds.), Review of Human Development(pp 614-628), New York: Wiley-Interscience.

Lawton, M.P., Moss, M., Fulcomer, M. & Kleban, M.H. (1982). A research and service oriented multilevel assessment instrument. Journal of Gerontology, 37(1), 91-99.

Lehmann, S., Shinn, M., Allen, J. & Simko, P. (1983). Measuring Social Supports. Paper presented at the annual meeting of the American Psychological Ass., Anaheim, CA, August.

Mancini, J., Quinn, W., Gavigan, M. & Franklin, H. (1980). Social network interaction among older adults: Implications for life satisfaction. Human Relations, 33(8), 543-554.

McCormick, K.M. (1983). Friendship: A comparison of reciprocating and nonreciprocating best-friend pairs expectation of best-friend other friends. Dissertation Abstracts Int'l, 44(5-B), 1639-1640.

Reis, H.T. (1984). Social interaction and wellbeing. In S. Duck (Ed.), Personal Relationships V: Repairing Personal Relationships, London: Sage Publications.

Simons, R.L. (1984). Specificity and substitution in the social networks of the elderly. Int'l Journal of Aging and Human Development, 18(2), 121-139.

Stock, W.A., Okun, M.A. & Benin, M. (1986). Structure of subjective wellbeing among the elderly. Psychology and Aging, 1(2), 91-102.

Toseland, R. & Rasch, J. (1979). Correlates of life satisfaction: An AID analysis. Int'l Journal of Aging & Human Development, 10(2), 203-211.

Ward, R.A., Sherman, S.R. & LaGory, M. (1984). Subjective network assesments and subjective wellbeing. Journal of Gerontology, 39(1), 93-101.

Wrightsman, L.S. & Deaux, K. (1981). Social Psychology in the 80's, Monterey, CA: Brooks/Cole Publishing.